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EXAMINER

EINSMANN, MARGARET V

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 18

Application Number: 09/486,558  
Filing Date: April 13, 2000  
Appellants: MAUBRU ET AL.

Mark J. Feldstein  
For Appellant

EXAMINER'S ANSWER

MAILED  
MAY 06 2002  
GROUP 1700

This is in response to the appeal brief filed February 14, 2002.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief contains a statement that the legal representative knows of no other appeals or interferences which will directly affect or be affected by the Board's decision in the pending appeal.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: In addition to the issue stated in the brief, the claims are also rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-23 of US patent 6,090,162. On page 7 of paper #13 applicants stated that they will file an appropriate terminal disclaimer when allowable subject matter is indicated. Accordingly, applicants are not traversing said rejection in this appeal.

**(7) *Grouping of Claims***

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The rejection of claims 20-47 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

3,918,896	Kalopissis et al.	11-1975
5,061,289	Clausen et al.	10-1991

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 20-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalopissis in view of Clausen.

Kalopissis, U.S. Patent No. 3,918,896, teaches compositions for dyeing hair which contain at least one oxidation base in combination with at least one halogenated coupler of formula (I) as claimed, see Abstract. Kalopissis teaches that p-aminophenol oxidation bases may be used, particularly when mahogany or chestnut colors are desired, see col. 2, lines 44-50. Kalopissis teaches that the oxidation bases and couplers may be present in mediums as claimed in the claimed amounts at the claimed pH's, see col. 3, lines 22-24; 45-49 and 61-66. The compositions are applied to hair with oxidants as claimed in methods as claimed, see col. 3, line 67-col. 4, line 7. Kalopissis exemplifies various compositions which contain a coupler as

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claimed in combination with p-aminophenol, which compositions are applied to hair in dyeing methods resulting in chestnut, mahogany or red hair colors, see Examples 22, 27 and 32.

Kalopissis does not teach pyrazole oxidation bases as claimed, and does not specifically teach the claimed kits.

Clausen, U.S. Patent No. 5,061,289, teaches hair dyeing compositions which contain a developer and coupler, wherein the developer is a diaminopyrazole of formula (I), which diaminopyrazoles encompass those as claimed, and are used in the claimed amounts, see col. 1, line 63-col. 2, line 22. Clausen teaches that such diaminopyrazoles are used to dye hair brilliant red shades with a great depth of color when combined with conventional couplers, and that such developers are physiologically acceptable as compared to p-aminophenol which is conventionally used to obtain red shades, see col. 1, lines 38-65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to at least partially substitute the p-aminophenol oxidation base of Kalopissis, such as in the patentee's Examples 22, 27 and 32, with a diaminopyrazole as claimed in the claimed amounts, resulting in dyeing compositions and methods as claimed, because Clausen teaches that the claimed diaminopyrazoles are an improvement over p-aminophenol because they have better physiological properties. Furthermore, Clausen teaches that the claimed diaminopyrazoles obtain brilliant red shades when combined with conventional couplers, further motivating those skilled in the art to replace Kalopissis's red oxidation base p-aminophenol with a diaminopyrazole oxidation base as claimed, absent a showing otherwise. The Office holds the position that the containment of the compositions of Kalopissis as modified by Clausen in kits as

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claimed would have been obvious to those skilled in the hair dyeing art because such kits are conventional for the storage of two-part oxidative hair dyeing compositions.

**(11) *Response to Argument***

Appellant's arguments regarding the above rejection have been fully considered but they are not persuasive for the following reasons.

In response to applicant's argument that there is no suggestion in Kalopissis to substitute the diaminopyrazoles for the oxidation basis specifically required by Kalopissis, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). One of ordinary skill in the art knows that oxidation basis are always used in combinations in order to modify the color produced. Since the secondary reference to Clausen et al. teaches that the diaminopyrazoles are an improvement over the p-aminophenol developer of Kalopissis (see Clausen et al. col 1 lines 43-47), Clausen et al. teach not only that the diaminopyrazoles are used for the same purpose, but also, they are an improvement over a developer used by Kalopissis.

In response to appellant's arguments that it would not be obvious to add the diaminopyrazole coupler of Clausen to the composition of Kalopissis, it is prima facie obvious to combine two compositions each taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose. See *In re*

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Kerkhonven, 205 USPQ 1069, 1072. For this reason it would also have been obvious to use the diaminopyrazole couplers in combination with the developers taught by Kalopissis.

In response to the argument that the combination is contrary to the express teachings of Kalopissis et al, appellant states that the composition of Kalopissis must contain a paraphenylenediamine or a paraaminophenol or a heterocyclic oxidation base such as 2,5-diaminopyridine or 2-hydroxy-5-aminopyridine.” Appellant is referring to the statement beginning on line 67 of column 2 and bridging to line 24 of column 4. However, appellant does not seem to read the essential components in the same manner as does this office when he states that paraaminophenol is essential to the composition of Kalopissis. On the contrary, it is merely an alternative oxidation base. This office fails to see where Kalopissis states that paraaminophenol “is **essential** to the composition and **must** be present” as stated in the brief at page 6 first full paragraph. The essential component (a) is a coupler of patentee’s formula 1, which includes appellant’s formula 1 coupler. The essential component (b) is an oxidation base (which is an art recognized equivalent for the term developer used in Clausen). Appellant states that paraaminophenol is essential to the composition, while a proper reading of the (b) component in the composition is that a conventional oxidation base is essential, and that a heterocyclic oxidation base is perfectly equivalent to paraaminophenol. Kalopissis clearly teaches the equivalence of a heterocyclic oxidation base in place of paraaminophenol as the essential (b) component in the compositions. (Col 3 lines 3-5). Clausen’s diaminopyrazole is a developer or base for oxidation hair dyeing. Kalopissis is saying that the oxidation hair dyeing composition must contain a conventional oxidation base to go along with his inventive coupler. One skilled in the art knows that this is true, since Kalopissis’s inventive coupler cannot be used without an

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oxidation base because couplers are modifier which yield only feeble colors through oxidation. See Zviak, page 265 (Attachment). (This page is from the same chapter as the pages appended to the brief as Exhibit 1. ) While it is true that Kalopissis did not define diaminopyrazoles as the particular heterocyclic oxidation base, one can see that the base of Clausen was not invented until many years after this patent. In his invention, Clausen specifically states that his diaminopyrazoles are developer substances, and are an improvement over paraaminophenol oxidation base (developers) suggested by Kalopissis. All disclosures of the prior art, including non-preferred embodiment, must be considered. See *In re Lamberti and Konort*, 192 USPQ 278 (CCPA 1967); *In re Snow* 176 USPQ 328 (CCPA 9173) All of the disclosures in a reference must be evaluated for what they fairly teach to one of ordinary skill in the art. *In re Smith*, 32 CCPA 959, 148 F.2d 351, 65 USPQ 167; *In re Nehrenberg*, CCPA 1159, 280 F. 2d 161, 126 USPQ 383. Note M.P.E P. 2123, "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain. *In re Heck*, 699 E.2d 1331, 1332-1333, 216 USPQ 1038, 1039 (Fed Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.) cert. denied, 493 U. S. 975 (1989). Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). In this case, Kalopissis clearly teaches that heterocyclic developers may be used. Since this statement is taken with what one of ordinary



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skill in the art knows, which includes: the diaminopyrazoles and triaminopyrazoles as claimed are both heterocyclic compounds and are both oxidation bases or hair color developers, they fall within the teaching of Kalopissis's (b) component., and thereby can be used as his oxidation base or developer. Accordingly, since it has been demonstrated above that paraaminophenol is **not** an essential component in the composition of Kalopissis, applicant's invention is distinguished from the invention of *Winner* as discussed on pages 6-7 of appellant's brief. Additionally, as one reads the further essential components of the composition of Kalopissis, col 3 line 12 states that the compositions can contain several oxidation bases (component d). This statement opens the composition of Kalopissis to further known oxidation bases, inclusive of the diaminopyrazole and triaminotriazole bases as claimed. This (d) component is motivation to add the claimed oxidation bases to the compositions in the working examples of Kalopissis. Accordingly it would have been prima facie obvious to either add the diaminopyrazole or triaminopyrazole oxidation bases as claimed or to substitute them for the oxidation bases in the working examples.

Appellant argues that a proper reading of Clausen is that one cannot partially substitute paraaminophenol with diaminopyrazole, but one can only completely substitute it, since the problem with paraaminophenol as not being physiologically tolerated will not be solved. (page 8 of appellant's brief) This argument is not understood, since it is common knowledge that reducing the amount of a substance that is not well tolerated can make it tolerable. One generally does not react to a substance until a threshold amount is used; a lactose-intolerant person can generally tolerate a small amount of a milk product; one strawberry does not usually cause a rash. In a like manner, a small amount of paraaminophenol is more tolerable than a larger amount. Applicant then states that Clausen teaches away from using any

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paraaminophenol. This office cannot find that statement in Clausen. Clausen states, "it is also possible, of course, to use the developer substances of formula (1) with known developer substances..." col 2 lines 24-26.

In response that the examiner has not established a reasonable expectation of success for the proposed combination. The expectation of success is:

1. Clausen teaches that diaminopyrazoles were developed specifically to replace paraaminophenol as the red component for oxidation bases in hair dyeing compositions. Thus indicates that it will successfully produce a red shade when reacted with a conventional oxidizing agent in an oxidative hair dyeing composition. This additionally teaches that it can be used in combination with paraaminophenol to shade a hair dyeing composition.

2. Kalopissis teaches the use of conventional oxidation bases in his compositions including heterocyclic oxidation bases. As noted above, the diaminopyrazole of Clausen is an oxidation base, it is used as a color developer in oxidative hair dyeing compositions, and it is a heterocyclic compound. Accordingly it will be expected to contribute to a successful oxidation hair dying process.

Appellant next argues that In re Kerkhoven does not apply since the components herein react and are not static. Oxidation hair dyes are always used in combination to obtain any shade desired. The stylist routinely mixes two or more already prepared hair colorants to match a customer's shade. Appellant quotes Kalopissis's statement that the couplers react with the bases to produce dyes. This is merely a statement of what is known in the art. It is the definition of the process of oxidative hair coloring. Appellant states that the art is unpredictable and one cannot know if a combination is toxic until it is tried. In response to this argument, appellant is

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directed to Clausen who teaches the use of his developers in combination with conventional oxidation bases, and Kalopissis who teaches not only the use of heterocyclic oxidation bases but also the addition of other oxidation bases to his composition. In fact, noting the claims of Kalopissis, not only does he suggest the addition of additional bases, but he also adds additional couplers and direct dyes. These places all point to what is well known to the hair dye chemist, that one generally uses mixtures of more than one known base and more than one known coupler without the expectation of toxicity. Regarding the statement of Zviak that cosmetic compositions **may** be toxic, this has not prevented hair dye chemists from mixing known oxidation bases and known couplers to adjust the shade of a color to match a desired tint. The statement that a cosmetic ingredient may be toxic also logically infers that it probably will not be toxic when using known products for their intended utility. Appellant refers to examples in the specification to show that the art is unpredictable. While this may show that changing couplers will result in unexpected results, this office fails to see how the above cited examples demonstrates that art is unpredictable with respect to the toxicity of oxidative hair dye compositions. Additionally, appellant has not compared the compositions of the invention to the compositions of Kalopissis, who teaches the addition of heterocyclic bases as equivalent to paraaminophenol. In paper #7, page 6, this office explained why the comparative examples did not overcome the rejections of record. Appellant failed to respond to that statement by providing a declaration.

Appellant states that Clausen does not state that the diaminopyrazoles may be used with conventional couplers. Note col 2 line, "Of the known couplers, the following are preferably taken into consideration," This statement indicates that all known couplers are considered, even

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if not preferred. However, at this point appellant is arguing this reference in a vacuum when it is used in combination. Appellant states that the examiner has provided no evidence that the couplers of Kalopissis are conventional. See the abstract of Kalopissis where he defines his compound I as a coupler for hair dyeing compositions. The arguments on page 15 of the brief are directed to preferred embodiments. A reference is not limited to its preferred embodiments. Additionally, Clausen is the secondary reference, and Kalopissis provides sufficient motivation for the inclusion of a heterocyclic oxidation base.

Regarding the "substantial evidence" argument (page 16 brief), the following is presented:

1. Clausen teaches that diaminopyrazoles were developed specifically to replace paraaminophenol as the red component for oxidation bases in hair dyeing compositions. Thus indicates that it will successfully produce a red shade when reacted with a conventional oxidizing agent in an oxidative hair dyeing composition. This additionally teaches that it can be used in combination with paraaminophenol to shade a hair dyeing composition.

2. Kalopissis teaches the use of oxidation bases in his compositions including heterocyclic oxidation bases. As noted above, the diaminopyrazole of Clausen is an oxidation base, it is used as a color developer in oxidative hair dyeing compositions, and it is a heterocyclic compound. Accordingly it will be expected to contribute to a successful oxidation hair dying process.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

*Margaret Einsmann*

Margaret Einsmann

Primary Examiner

Art Unit 1751

May 3, 2002

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# THE SCIENCE OF HAIR CARE

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## Oxidation Coloring

- $C_{11}$  1,2,3-trihydroxybenzene (pyrogallol)  
 1,2,4-trihydroxybenzene  
 1,2,4-trihydroxy-5-methylbenzene (2,4,5-trihydroxytoluene)  
 $C_{10}$  1,5-dihydroxynaphthalene  
 $C_7$  1,4-dihydroxybenzene (hydroquinone)  
 $C_6$  1-hydroxynaphthalene ( $\alpha$ -naphthol)

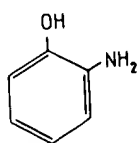
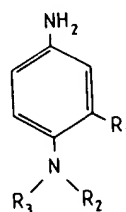
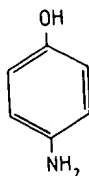
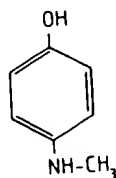
On white hair, deep shades can only be obtained using the aromatic amines, or the aminophenols with amino and hydroxyl groups in *ortho* or *para* position to each other. Thus, only compounds capable of producing the quinone monoimine or quinone diimine forms yield highly colored pigments through oxidation. Similarly, it has been observed that copolymerization does not result in deep shades unless quinone monoimines or quinone diimines participate in the condensation. One of the intermediaries in the copolymerization must almost always be an *ortho*- or *para*-diamine or aminophenol. This observation leads to a classification of oxidation products that is not one of simple differentiation by chemical class.

The so-called *bases* or primary intermediates are the aromatic diamines, the diaminophenols, the aminophenols with amino or hydroxy groups *para* or *ortho* to each other.

The "modifiers" or *couplers* are the *m*-diamines, the *m*-aminophenols, and the polyphenols. Taken separately, all these modifiers yield only feeble coloring through oxidation; cooxidation of modifier mixes, too, yield only slight coloring (yellow, blond-beige).

Table 1

Base	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>
B <sub>1</sub>	H	H	H
B <sub>2</sub>	CH <sub>3</sub>	H	H
B <sub>3</sub>	Cl	H	H
B <sub>6</sub>	H	C <sub>6</sub> H <sub>5</sub>	H
B <sub>8</sub>	H	CH <sub>2</sub> -CH <sub>2</sub> -OCH <sub>3</sub>	H
B <sub>9</sub>	H	CH <sub>2</sub> -CH <sub>2</sub> OH	CH <sub>2</sub> -CH <sub>2</sub> OH

B<sub>7</sub>B<sub>4</sub>B<sub>5</sub>